MERGERS AND ACQUISITIONS: We look at how a flurry of international downstream M+A activity could benefit GCC operators.

MOBILE REFINING
Mobile and mini refineries are providing huge opportunities for producers in the GCC.

WATER TREATMENT
We talk to Magnetrol Environmental to find out how downstream operators can maximise their water treatment performance.

FIVE MINUTES WITH:
Charlie Hamlin, Vice President & General Manager of UOP Middle East

P50

DR. ABDULWAHAB AL-SADOUN, GPCA
THE NEED TO REUSE AND RECYCLE WATER IS NOW MORE IMPORTANT THAN EVER.

INTERVIEW

AUTOMATION EXCELLENCE

Pierre Leretz, president and region division head, process automation, Asia Middle East and Africa at ABB, discusses the importance of adding in-country value.

QATAR Profiled: How much damage has the country’s decision to suspend downstream expansion projects done to its economy?
ABB’s Pierre Leretz, president and region division head, process automation, Asia, Middle East and Africa, discusses plant automation and the importance of finding and developing in-country talent.
With the price of oil still searching for a new floor, the GCC’s downstream operators are looking for ways to overcome a range of new challenges, as the world adjusts to the new reality of $50 oil. Just six months ago, this idea would have been all but unthinkable as crude continued to trade comfortably around the $100 mark.

While analysts refuse to be drawn on when, or even if, the price of crude will return to its previous levels, the dramatic price drop has made one thing abundantly clear for the petrochemical sector: downstream operators need to ensure that they are doing everything within their power to increase efficiency and boost their slender profit margins.

Process automation is the first step in a journey towards a new generation of ultra-modern, high tech refineries and petrochemical plants that will breathe new life into the GCC’s downstream industry, dramatically sharpening its competitive edge.

As GCC countries look to refocus their export portfolios on value-added downstream products, process automation will allow for far better integration across the full spectrum of the downstream sector.

In order for this vision to be realised, process automation companies are making significant commitments to the long term success of their GCC projects by insisting on extensive training programmes for local employees and by implementing a range of Long Term Service Agreements.

It is not enough to install the technology, people must be trained and supported to maximise and monitor its performance, as Pierre Leretz, president and region division head, Process Automation, Asia Middle East and Africa explains:

“For ABB, localisation and growing the local communities in the countries in which we operate is something that is embedded in our DNA. Nowhere is this more true than in The Kingdom of Saudi Arabia.”

COMMITTING TO THE FUTURE

In 2011, ABB was appointed as the Main Automation Provider for one of Saudi Arabia’s most ambitious downstream projects. Being selected as the Main Automation Provider for this project was a huge feather in ABB’s cap, but the company quickly realised that the appointment came with a genuine opportunity to contribute to the long term success of Saudi Arabia’s downstream sector.

“To select a company for such a project, obviously, you have to select the best technology, a company which has all the necessary resources, but there is also much more than that. There is a commitment to both the project and to the country.”

“In terms of commitment to the project, from ABB’s side, we had to provide both a moral commitment and a written commitment from the top executives of the group expressing our full commitment to the success of this project, whatever it takes,” explains Leretz.

“Whatever it takes” means investing significantly in human resources and knowledge development. Rather than bringing in that expertise from abroad, ABB are committed to developing in-country value within The Kingdom.

When ABB embarked on this project, it promised to bring in as many Saudi engineers as possible, within the project. In total, ABB committed to bring in 30 engineers to participate in the FEED stage, into the EPC stage and through to the Long Term Support Agreement stage.

The company has picked up engineers from the market and from its own ABB Saudi Arabia entity. ABB also went into universities to bring local engineers on board.

“Those engineers have been working in our different centres where we were executing this project [The US, Norway, India and KSA]. Out of those 30 engineers, a big portion, probably 80%, will actually be deployed on site in order to handle long term support services. That is very important and that is the best guarantee for the project to have a real support. This is not expatriate employees coming in and then eventually moving out of the country. This is actually Saudi Arabsians and that’s really important.”

These engineers are fully invested in the long term success of the project and the...
success of Saudi Arabia’s wider downstream industry. They will remain on the site, long after the start up process is complete, to monitor, analyse and refine the automation process. As part of the commitment to provide the required support on a long term basis, ABB expects those engineers to remain in place for a considerable duration of time.

“We have several commitments in place. The first commitment is for the commissioning and start up phase. I would call that the project phase. You have to start up the project, you have to deliver the project and then you can say OK, fine this is working.

“As soon as it gets to that stage, then the responsibility changes from the projects phase to the manufacturing phase. The manufacturing phase will be when people are actually running the plant, producing and selling their products. At that stage, the long term services phase kicks in. Obviously we would see our involvement there lasting for at least 10 years,” he added.

**PUSHING FURTHER DOWN THE VALUE CHAIN**

Adding as much value to products as possible in country is one way that producers in the Kingdom of Saudi Arabia and the wider GCC are looking to increase the margins in their export portfolio. Process automation firms are keen to help them do that, as Leretz explains:

“Integrated petrochemical projects are going to happen in many other places in the region – first of all in Saudi Arabia. In Saudi Arabia alone there are currently two or three truly mega projects that are going to happen with Aramco and their different partners.

“However, if you look at the wider region, you will notice that the other GCC countries are starting to embark on their own downstream projects. For obvious reasons. If you go further down the chain you will see that the further you go downstream, the more you have added value. So obviously that is the way to go.”

Petrochemical producers in the region will be looking to tweak and alter their product offerings to keep up with the ever changing global economic landscape and regional variations in feedstock choices. In the years ahead, successful downstream operators will be the ones who are able to alter their product offerings at a moment’s notice, taking advantage of heavier feeds as and when they become available.

“For ABB, localisation and growing the local communities in the countries in which we operate is something that is embedded in our DNA. Nowhere is this more true than in Saudi Arabia.”

PIERRE LERETZ, PRESIDENT AND REGION DIVISION HEAD, PROCESS AUTOMATION, ASIA, MIDDLE EAST AND AFRICA, ABB.

As plants in the region become progressively more ambitious, the technology they rely on needs to be flexible enough to accommodate this mind set. To this end, ABB was recently awarded a contract to provide operations management software to the project.

“They want to make sure that anytime anyone wants to change a set point, wants to change the control strategy or wants to change anything there, that there is a whole process in place, in order to guarantee the integrity of the whole thing.”
The control systems that are in place for the production units are what we call the CVOTS, which deals with the validation of the changes to be made in two simulator systems.

When they want to introduce some changes into their processes, the engineers first decide what changes they would like to make and then run them through the simulators. Once they see that the simulators are providing the results that they were expecting, only then are the changes loaded into the real time production systems," explains Leretz.

This is just one example of the myriad tasks that will keep ABB’s engineers and technical personnel busy onsite. The sheer scale of the project will mean that ABB’s experienced technicians will be needed well into the future.

“ABB has never before executed a project of this magnitude, having several different control systems on all of those different plants and interfacing with multiple EPC companies. It’s unique from the stand point of a Main Automation Contractor concept, the contractual model. It’s called MAC, which stands for the Main Automation Contractor. For such a large scale project a MAC had not been completed until now, so this really is something exceptional.”

THE WILL TO SUCCEED

As plants in the region become increasingly ambitious, the logistical and organisational skill required to execute them cannot be over stated.

“For projects of this size you cannot expect everything to go perfectly well from the start to the end of the project, so we have to work on a few things together with the operator.

I have to say that the relationship that exists on the site is fantastic. I have personally been on several of these weekly meetings where we will just sit down and discuss things. The spirit of cooperation is such as I have never seen before anywhere else,” explains Leretz.

“In two months’ time we will have visits from our CEO and at least two other executive committee members going to the site. I’m not talking about going to a board meeting, I’m talking about going to the actual site. This shows you the commitment that exists from both sides.

“Again, this is the level of cooperation that you need in order to be successful in such a unique project. This would be my conclusion: you cannot succeed in such a project without this degree of cooperation,” he adds.

With over 40% of oil and gas staff working in the GCC approaching retirement age in the next 10 years, ensuring the preservation and retention of skills will be of paramount importance.

As it moves further downstream through a series of technologically ambitious mega projects, Saudi Arabia will need to ensure that it develops sufficient talent in-country to sustain its vision for the future.

While process automation will allow plant operators to remove human staff from hazardous environments, it will also create demand for skilled engineers to maintain and refine the technology on site.

If Saudi Arabia and the wider GCC intend to continue its push further down the value chain, ensuring that there is sufficient local talent will be a crucial piece of the puzzle.

If other projects in the Kingdom of Saudi Arabia can follow ABB’s example of bringing in local talent, Saudi Arabia could find itself as the world’s leading downstream producer in the years to come.

PIERRE LERETZ, PRESIDENT AND REGION DIVISION HEAD, PROCESS AUTOMATION, ASIA, MIDDLE EAST AND AFRICA, ABB.